

## **THE AMAZING CASH CONTRAPTION**

### **BACKGROUND OF THE INVENTION**

[01] The present invention relates to a multiplayer gaming reward system and, more specifically, to a multiplayer gaming reward system which rewards the player of one or more gaming machines randomly selected from a pool of gaming machines at a predetermined reward time.

[02] In a casino or other gaming destination, it is common for gaming machines, particularly but not limited to slot machines, to be arranged in clusters or pools, often with each pool having a theme. Certain pools prominently display the availability of a reward, often an automobile or a large cash jackpot, which can be won only by players of the gaming machines in that pool, in order to increase excitement among players and to induce players to choose to operate the gaming machines in that pool.

[03] U.S. Patent No. 5,941,773, issued August 24, 1999 to Neville Harlick (hereafter referenced as '773) discloses a networked pool of gaming machines incorporating a mystery jackpot controller. The '773 system includes a first embodiment in which each single episode of use or play of a gaming machine in the pool (a single use being commonly called a "game" of the gaming machine) is randomly assigned a number from a defined range of numbers, and if that number matches a preselected prizewinning number from the range, a reward goes to the player of that game. If the randomly assigned number does not match the prizewinning number, the randomly assigned number is removed from the range and is not reused until after a match with the prizewinning number has resulted in the reward being provided to a player. A second embodiment of '773 allows random selection of an instant of

time, and then a cumulative count of games after that instant with the reward going to the player of the game corresponding to a predetermined value of the cumulative game count.

[04] However, either system of '773 is somewhat cumbersome in operation because every game of each gaming machine must be recognized and analyzed and, should the central controller incur a delay in operation, the gaming machine may not be immediately available for the player's next game, causing player frustration and a possible loss of business. Additionally, a single player may monopolize a pool of gaming machines--as is an informal but known practice in many casinos--because a reward to one of that pool of gaming machines is inevitable under the '773 system if the gaming machines in the pool are played for long enough. Therefore a single aggressive player seeking the reward may discourage or prevent others from playing at gaming machines in the pool in order that he or she may "chase the jackpot". The casino revenue could be effected by this practice because that single player probably cannot play successive games on multiple gaming machines as quickly as if each of the gaming machines were operated by a different player. The number of individual games (and resultant revenue) per hour is therefore lower than if each player were playing only one gaming machine at a time.

[05] Additionally, it is well-known in the art for casinos to offer player incentive programs in which each player receives a unique player identifier, often embodied in a plastic "player's club card" or the like, and the player can associate his or her own unique player identifier with a gaming machine he or she is currently using. The player then earns points corresponding to frequency and level of gaming machine play and the points can be redeemed for rewards such as cash or complimentary goods or services.

[06] One advantage of this type of player incentive program is that generally the player incentive program only allows the unique player identifier to be associated with a single gaming machine at a time (often by requiring the plastic card to remain inserted into a card

reader on the gaming machine during use in order to accumulate points), therefore discouraging the player from monopolizing a pool of gaming machines. Another advantage of a player incentive program is that the casino can collect valuable information on the playing habits of each individual player and thereby personalize promotions to that player to both create affinity between that player and the casino and to maximize the likelihood of the player visiting the same casino or family of casinos at another time. It is thus important, for more thorough collection of player statistics and resultant marketing advantages, that players be encouraged to associate their own unique player identifiers with a gaming machine for every use of that gaming machine.

[07] As an example of a player incentive program, U.S. Patent Application Publication No. 2003/0013527 to Rick Rowe et al., published January 16, 2003 (hereafter referenced as ‘527) discloses a method and system for providing information to a particular player or players of one or more games or gaming machines. The information may be of a wide variety of types, with audio, video, and text information including advertising, instructions, promotional information, and account information being suggested by ‘527. A player identifies himself to the information system using a unique player identifier and when particular criteria are met, such as amount wagered, length of time of play, amount lost, or other criteria, the player is then presented with selected information. For example, once a player has identified themselves as playing a particular gaming machine, the information host may provide a bonus award to that player. Unfortunately, the ‘527 system, like the ‘773 system, requires that a large amount of information be obtained and processed for each player of the gaming machines, necessitating extensive computer processing. In addition, the ‘527 system links information (including bonuses and bonus opportunities) to specific player identifiers and thus may be subject to programming fraud or “favoritism” of certain specific players even if the prizes awarded are randomized.

[08] Accordingly, the art has sought a method and apparatus of a multiplayer gaming reward system which: does not require extra computer processing resources applied to each game of a gaming machine; encourages each player to concentrate on playing at a single gaming machine; prevents fraudulent bonus awards; encourages use of the unique player identifiers; may be used in a timely and efficient manner; and is more economical to manufacture and use.

[09] The present invention is directed to overcoming one or more of the problems as set forth above.

### SUMMARY OF THE INVENTION

[10] In a preferred embodiment of the present invention, a method of a multiplayer gaming reward system is disclosed. The method includes the steps of: providing a pool of at least two gaming machines; selecting one or more of the gaming machines from the pool at a predetermined reward time; determining an operational state of the selected gaming machine; and rewarding a player responsive to the operational state of the selected gaming machine at the predetermined reward time.

[11] In a preferred embodiment of the present invention, an apparatus of a multiplayer gaming reward system is disclosed. The apparatus includes a pool of at least two gaming machines, each gaming machine having an operational state and being in communication with a central control system. The central control system selects at least one of the gaming machines at a predetermined reward time and provides a reward to a player of the selected gaming machine responsive to the operational state of the selected gaming machine at the predetermined reward time.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

[12] For a better understanding of the invention, reference may be made to the accompanying drawings in which:

[13] Fig. 1 is a block diagram of a multiplayer gaming reward system according to a preferred embodiment of the present invention; and

[14] Fig. 2 is a flowchart of a multiplayer gaming reward system according to a preferred embodiment of the present invention.

## **DETAILED DESCRIPTION OF THE INVENTION**

[15] Fig. 1 depicts a multiplayer gaming reward system 100 for use in a casino or other gaming destination. The multiplayer gaming reward system 100 includes a pool 102 of two or more gaming machines 104, and a central control system 106. The gaming machines 104 may be reel-type slot machines, electronic slot machines, electronic card game machines, or any other suitable gaming machines 104. The gaming machines 104 each have an operational state, to be discussed below in detail, and are each in communication with the central control system 106. U.S. Patent No. RE37,885 E, issued October 15, 2002 to John F. Acres et al. discloses a possible arrangement for communication between the gaming machines 104 and the central control system 106. Alternatively, any other suitable communication system may be used. For descriptive purposes, the lines of communication are shown generally as 108 in Fig. 1, but one skilled in the art could readily provide any type of wired or wireless system to carry out the communications needed for the present invention in a specific situation. The central control system 106 exchanges information with one or more gaming machines 104 via the lines of communication 108.

[16] Preferably, the gaming machines 104 are adapted to accept a unique player identifier, shown in Fig. 1 as being embodied in a player identification card 110. Currently in most casinos, each unique player identifier is only able to be associated with a single gaming machine 104 at a given time for casino management reasons and the association will be referenced as a single-machine feature, but it is possible for a single unique player identifier to become associated with multiple gaming machines at the same time, perhaps through the use of a swipe-through card reader rather than the presently used insertion card readers, without departing from the spirit and scope of the present invention. The unique player identifier informs the gaming machine 104 and/or the central control system 106 of the identity of the specific player, and the gaming activity of that player can then be tracked and recorded as desired by the casino. The player identification card 110 in Fig. 1 is shown as being associated with a selected gaming machine 104', for exemplary purposes. The association could be done through a device, such as a card reader or keypad, on the gaming machine itself or a device separate from, yet still identifying, a gaming machine and connected instead directly to the central control system 106.

[17] Much like the frequent flyer programs of airlines, the casino can use the unique player identifier to identify certain classes of players, as well as track each individual player. For example, a player might become a member of an elite group once he or she has achieved a certain number of points, number of discrete visits, number of high-stakes wagers, or any other suitable differentiating factor.

[18] An informational indicator 112 is optionally associated with the pool 102 or with individual gaming machines 104 in the pool. This informational indicator 112 may be of any suitable type, including but not limited to a visual indicator or an aural indicator. The informational indicator 112 is adapted to inform a player or a potential player that the multiplayer gaming reward system 100 is available in connection with one or more gaming

machines 104. By way of example, a cluster of gaming machines 104 might be underneath a lighted sign emblazoned with the trade name of the multiplayer gaming reward system 100 or might be cordoned off in an area decorated in the trade dress of the multiplayer gaming reward system 100. The gaming machines 104 themselves could display an indication of participation in the multiplayer gaming reward system 100 such as a sign or a particular color scheme. Any of the informational indicators 112, whether freestanding or associated with a gaming machine 104, may include an indication of the value of the next available reward and/or the predetermined reward time, along with any other suitable inducements to players; the nature of the informational indicators 112, when provided, is not essential to the present invention.

[19] Each gaming machine 104 has an operational state. For ease of description, the operational state will be discussed as chosen from three options, but the present invention need not be limited to these three options. The gaming machine 104 may (1) not be in use, or (2) be in use without an associated unique player identifier, or (3) be in use with an associated unique player identifier.

[20] “In use”, in the current context, does not necessarily mean that the game is actually in operation (e.g., the reels of a slot machine are still spinning after an activating lever pull) but may instead indicate that the gaming machine 104 has been operated by a player within a predefined window of time surrounding the instant that the operational state is ascertained. Due to the nature of players to start a next game almost immediately following a previous game, the predefined window of time may be rather short, but some allowance needs to be made for brief distractions which do not indicate a cessation of play but may temporarily divert the attention of the player. For example, the player may pause to transfer coins or tokens between containers or to request refreshments from a casino employee.

[21] Preferably, the window of time will be short enough that the gaming machine 104 can be actually “in use”, as defined above, by only one player within that window of time, so as to avoid misattributing a first player’s use of the machine to a second player taking control of the gaming machine 104 from the first player, even if the changeover time is brief. A suitable window of time can readily be determined experimentally. A window of time based substantially on the presence or absence of a player identification card 110 associated with the gaming machine 104 might also or instead be acceptable for the purpose of defining “use”.

[22] Fig. 2 depicts a flowchart of a preferred embodiment of a multiplayer gaming reward system 100 according to the present invention. Certain steps of the flowchart may not be necessary to the present invention, and will be identified as nonessential or optional in the written description of the flowchart. It is expected--but not mandatory--that the central control system 106 would implement the logic of the Fig. 2 flowchart in a known manner.

[23] Control starts at start block 200. At first decision block 202, the current time is compared to a predetermined reward time. The predetermined reward time may be determined by one or more of: current time of day, current day of week, current day of year, number of gaming machines 104 available, number of gaming machines 104 in use, length that gaming machines 104 have been in use, interval since previous reward time, awarding of a reward at previous reward time, identity of selected gaming machine at previous reward time, presence of players at the gaming machines, number of players at the gaming machines, available reward value, or any other suitable factors including a time chosen or set by casino management. If the current time is not equal to the predetermined award time, control returns to start block 200.

[24] If the current time is equal to the predetermined reward time, the central control system 106 selects one or more gaming machines 104 from the pool 102 at first control block



204. For simplicity, a single selection will be assumed in this description but it is intuitively obvious that the logic of the present invention can readily be used with multiple selected gaming machines if desired. The selection is preferably done randomly, using any of a number of suitable random number generator algorithms, but the selection may be done according to some other predefined scheme without departing from the present invention. The selected gaming machine is shown as 104' in Fig. 1, for ease of reference. Control proceeds to second control block 206 where the operational state of the selected gaming machine 104' is determined. The remaining logic steps of the flowchart are preferably performed based on a "snapshot" one-time determination of the operational state of the selected gaming machine 104' taken at substantially the predetermined reward time. Though the central control system 106 may have the ability to continuously monitor the selected gaming machine 104', such a "snapshot" determination will assist in avoiding very unlikely but potentially troublesome conflicts. For example, if a player stops using the selected gaming machine 104' exactly simultaneously with, or very shortly after, the predetermined reward time, that player might not be given the reward if portions of the logic of the flowchart are performed using individual queries of the selected gaming machine 104' after the predetermined reward time instead of using captured information from the instant of the predetermined reward time.

[25] At second decision block 208, the central control system 106 determines whether the selected gaming machine 104' is in use, taking "in use" as defined above to allow for short breaks between successive games when both games are most likely played by the same player. If the selected gaming machine 104' is not in use, control proceeds to an optional third control block 210 where one or more informational indicators 112 would display a message to let players or potential players know of the missed opportunity, in an effort to encourage players to use the gaming machines 104 in the pool 102. Regardless of

performance of the third control block 210, control then returns back to the start block 200, choosing a new predetermined reward time at fourth control block 212, optionally by application of a predetermined time interval. The predetermined time interval is the length of time elapsed between two predetermined reward times and may be simply a repeating set length of time (e.g., fifteen minutes) or may rely upon any of the factors discussed above or otherwise suitable to determine the predetermined reward time.

[26] If the central control system 106 determines at second decision block 208 that the selected gaming machine 104' is in use, control advances to third decision block 214, where the availability of a unique player identifier associated with the selected gaming machine 104' is determined. This step is optional and is desirable when the multiplayer gaming reward system 100 is being used to encourage use of the unique player identifiers. If this optional step is chosen and a unique player identifier is not available, control passes to fifth control block 216, where optionally a denial of reward message is displayed on an informational indicator 112.

[27] Care must be taken to avoid offense if this optional denial of reward message is displayed directly to the player of the selected gaming machine 104'. Some players do not wish to obtain a unique player identifier, for privacy reasons, and though the denial of reward message is intended to encourage players to enroll in the casino's player incentive program, missing out on a valuable reward because of legitimate personal choices may annoy or enrage a player. However, missing a relatively low-value reward, such as a complimentary meal at a casino restaurant, is less likely to engender the extreme negative reaction that might be produced if, for instance, a substantial cash prize was denied. Whether or not the denial of reward message is displayed, control proceeds from third decision block 214 back to fourth control block 212 to select the next predetermined reward time and then to start block 200.

[28] If the selected gaming machine 104' is found to be in use in second decision block 208, and has an associated unique player identifier as in third decision block 214 if required by the chosen embodiment, control passes to sixth control block 218, where a value and type of reward is chosen. The reward may consist of at least one of: cash, player incentive points, and complimentary goods or services. In addition, the value of the reward may vary depending upon such factors as the availability of a unique player identifier, elite group status of the player, identity of the player, time or date of reward, or any other suitable factors. Indeed, the reward may simply have an assigned value or be chosen from a predefined group of potential rewards. The amount and type of reward for a given situation can readily be assigned by one of skill in the art, using any suitable method. This step is nonessential to the invention, as, for example, when a simple indication of a pending or available reward is intended to encourage the player to take some additional action to determine and/or receive the reward as part of a larger promotion.

[29] Once the value of the reward is determined at sixth control block 218, control proceeds to seventh control block 220, where the reward is optionally announced via the informational indicators 112 or in any other desired format. Regardless of announcement to other players or potential players, the player of the selected gaming machine 104' is notified of the reward at seventh control block 220 and is then provided with the reward at eighth control block 222. It is anticipated that the selected gaming machine 104' will be disabled from further operation while the reward is being provided to the player, as is standard with gaming machines 104. The reward may be given electronically or may be provided by a human attendant. The method chosen to provide the reward may vary according to the amount or type of the reward. It is anticipated that the provision of a reasonably large reward would be accomplished by a human attendant so as to cause a great deal of attention from surrounding players, perhaps employing flashing lights and music playing on the selected

gaming machine 104' and/or the informational indicators 112, whereas a small reward may be paid directly to the player via the selected gaming machine 104' or by way of a redeemable ticket or a credit to the player's account in the player incentive program. Once the player has been provided with the reward, control selects the next predetermined reward time at fourth control block 212 and returns to start block 200, to repeat the method of the present invention as desired by the casino management.

[30] Other aspects, objects, and advantages of the present invention can be obtained from a study of the drawings, the disclosure, and the appended claims.